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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,488	09/05/2003	Ryo Minoguchi	AA602M	8376

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EXAMINER

SPERTY, ARDEN B

ART UNIT PAPER NUMBER

1771

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/656,488

Applicant(s)

MINOBUCHI ET AL.

Examiner

Arden B. Sperty

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Application filed 9/05/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/05/03.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

**NON-FINAL OFFICE ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 11-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is intended by the requirement that the "thermoplastic fibers include from about 10% to 30% of the thermoplastic fibers."

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1-3 and 6-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,558,363 to Keuhn, Jr. et al., in view of US 5,143,680 to Molnar et al.
5. Regarding claims 1, 7-8, 13, and 17, the Keuhn reference teaches an absorbent article comprising a topsheet, backsheet, and an absorbent body (second layer) disposed between the topsheet and backsheet (Abstract). The absorbent article further includes a surge management layer (first layer), disposed between the topsheet and the absorbent body, comprising a thermally bonded airlaid web of natural and synthetic fibers (col. 26, lines 22+). Natural fibers include cellulosic fibers, as is taught earlier in

Art Unit: 1771

the reference at column 12, lines 24-26. The synthetic fibers of the surge management layer include polymeric bicomponent fibers (col. 26, lines 40-50) and may include a polyolefin (col. 26, line 25). The material of the surge management layer is treated with a surfactant to impart wettability and hydrophilicity (col. 26, lines 30-36). The reference is silent with respect to specific surfactant compositions, therefore it would have been necessary for one of ordinary skill in the art to turn to additional relevant art to determine common and suitable surfactant compositions. The Molnar reference teaches an absorbent non-woven fibrous pad comprising cellulosic and thermoplastic fibers, used in the same capacity as the material of the Keuhn reference, wherein phosphate esters are used as surfactants due to their moisture-wicking properties (col. 14, lines 9-27, 56-59). Therefore, it would have been obvious to one of ordinary skill in the art, having turned to additional prior art for specific surfactant compositions used in the same capacity, to use the phosphate esters taught by Molnar as the surfactant composition in the manufacture of the material of the Keuhn reference.

6. Regarding claims 2-3, absent a showing of unexpected results with the claimed phosphate esters, it would have been obvious to one of ordinary skill in the art to select the best type of phosphate ester based on the properties desired in the final product.

7. Regarding claims 6 and 16, while the Keuhn reference does not require specific density of the surge management layer, it would have been obvious to determine the workable density ranges for the intended use (col. 26, lines 10-14). Absent a showing of unexpected results with the claimed density, no patentable difference is seen between the prior art and the claimed invention.

8. Regarding claims 9-10, 12, and 16, the Keuhn reference teaches the inclusion of absorbent gelling materials (col. 12, lines 23-26) in the amount of 1 wt % to 90 wt % (col. 13, lines 46-53) in the absorbent material.

9. Regarding claim 11, the reference teaches varying anticipatory ranges of thermoplastic fibers present in the absorbent body layer of the absorbent material (col. 19, lines 26-36).

10. Regarding claim 14, the surge management layer, which is positioned between the topsheet and the absorbent body, can be of any desired shape, may extend over only a part of the absorbent body, and may be positioned anywhere along the absorbent body, thus anticipating the requirement that the first layer have a smaller area than the second layer. While the reference is not concerned with the thickness relationship of the surge management layer and the absorbent body, it would have been obvious to one of ordinary skill to determine the optimum thicknesses based on the ultimate intended use of the product.

11. Regarding claim 15, the reference teaches a variety of attachment means for connecting the various layers of the diaper components (col. 10, lines 26-38).

Embossing is a well-known attachment means in the art, and is understood to be included in the broad teaching of the reference, "employing various types of suitable attachment means" (col. 10, line 27-28). Attachment means would be inherently required to maintain placement of the surge management layer. Therefore, it would have been obvious to one of ordinary skill in the art to attach the layers in a fashion

meeting Applicant's claim limitations, motivated by a need to maintain placement of the surge management layer.

12. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keuhn as applied to claim 1 above, and further in view of US 5,969,026 to Mor et al.

13. As stated above, the Keuhn reference teaches an absorbent article comprising a topsheet, backsheet, and an absorbent body (second layer) disposed between the topsheet and backsheet (Abstract). The absorbent article further includes a surge management layer (first layer), disposed between the topsheet and the absorbent body, comprising a thermally bonded airlaid web of natural and synthetic fibers (col. 26, lines 22+). Natural fibers include cellulosic fibers, as is taught earlier in the reference at column 12, lines 24-26. The synthetic fibers of the surge management layer include polymeric bicomponent fibers (co. 26, lines 40-50) and may include a polyolefin (col. 26, line 25). The material of the surge management layer is treated with a surfactant to impart wettability and hydrophilicity (col. 26, lines 30-36). The reference is silent with respect to specific surfactant compositions, therefore it would have been necessary for one of ordinary skill in the art to turn to additional relevant art to determine common and suitable surfactant compositions. The Mor reference refers to the known use of surfactants, such as the ones claimed by Applicant, in the textile art to increase wettability of fibers (col. 2, line 61- col. 3, line 9). Therefore, it would have been obvious to one of ordinary skill in the art, having turned to the related prior art for specific surfactant compositions used in the same capacity, to use the surfactants taught by Mor

Art Unit: 1771


in the manufacture of the material of the Keuhn reference. Absent a showing of unexpected results with the specific esters of claims 2-5, it would have been obvious to one of ordinary skill in the art to select the best type of surfactant based on the properties desired in the final product.

### **Conclusion**


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arden B. Sperty whose telephone number is (571)272-1543. The examiner can normally be reached on M-Th, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571)272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Arden B. Sperty  
Examiner  
Art Unit 1771

February 2, 2005

  
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